



A Personalized Learning Platform

Udemy Clone Application

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INTRODUCTION

- Welcome to **Udemy Clone Application**
- A personal learning where users can:
 - Register and create accounts
 - Login and access courses
 - Browse and purchase courses
 - Add reviews for completed courses
 - Track and manage purchased courses

FEATURES OF THE APPLICATION

1. User Registration & Login
2. Course Viewing & Purchase
3. Review and Ratings
4. Secure Payment Options
5. User Dashboard

TECHNOLOGIES USED

- **Programming Language:** Java
- **Database Management:** MySQL, JDBC (Java Database Connectivity)
- **User Input Handling:** Scanner Class
- **Object-Oriented Concepts:**
 - Encapsulation, Inheritance, Polymorphism, Abstraction
- **Design Patterns:**
 - Singleton Pattern (Database Connection)
 - Factory Pattern (Can be applied for object creation)
- **Security Considerations:**
 - Password hashing for authentication
 - Use of Prepared Statements to prevent SQL Injection

CODE STRUCTURE OVERVIEW

- **Main Class:** UdemyCloneApp
- **Other Classes:**
 - User (Handles registration, login, and user data)
 - Course (Displays courses and manages purchases)
 - Review (Handles reviews and ratings)
 - Database (Stores data)
 - PaymentProcessor (Handles payments)

CLASS STRUCTURE OVERVIEW

1. UdemyCloneApp (Main Class)

- Manages the main menu and user interactions.
- Handles user registration, login, and course browsing.

2. UserBase (Abstract Class)

- Defines base attributes for users.
- Contains common user-related methods.

3. User (Extends UserBase)

- Stores user details (ID, name, email, password).
- Manages registration, login, and course tracking.
- Interacts with the Database class for user authentication.

4. Course

- Stores course details (ID, title, domain, description, price, rating).
- Displays course information.
- Handles course purchases.

5. Review

- Allows users to add and view course reviews.
- Stores review details in the database.

6. Payment (Interface)

- Defines the processPayment() method for different payment types.

7. PaymentProcessor (Implements Payment)

- Handles course payment transactions.
- Manages payment methods and discounts.

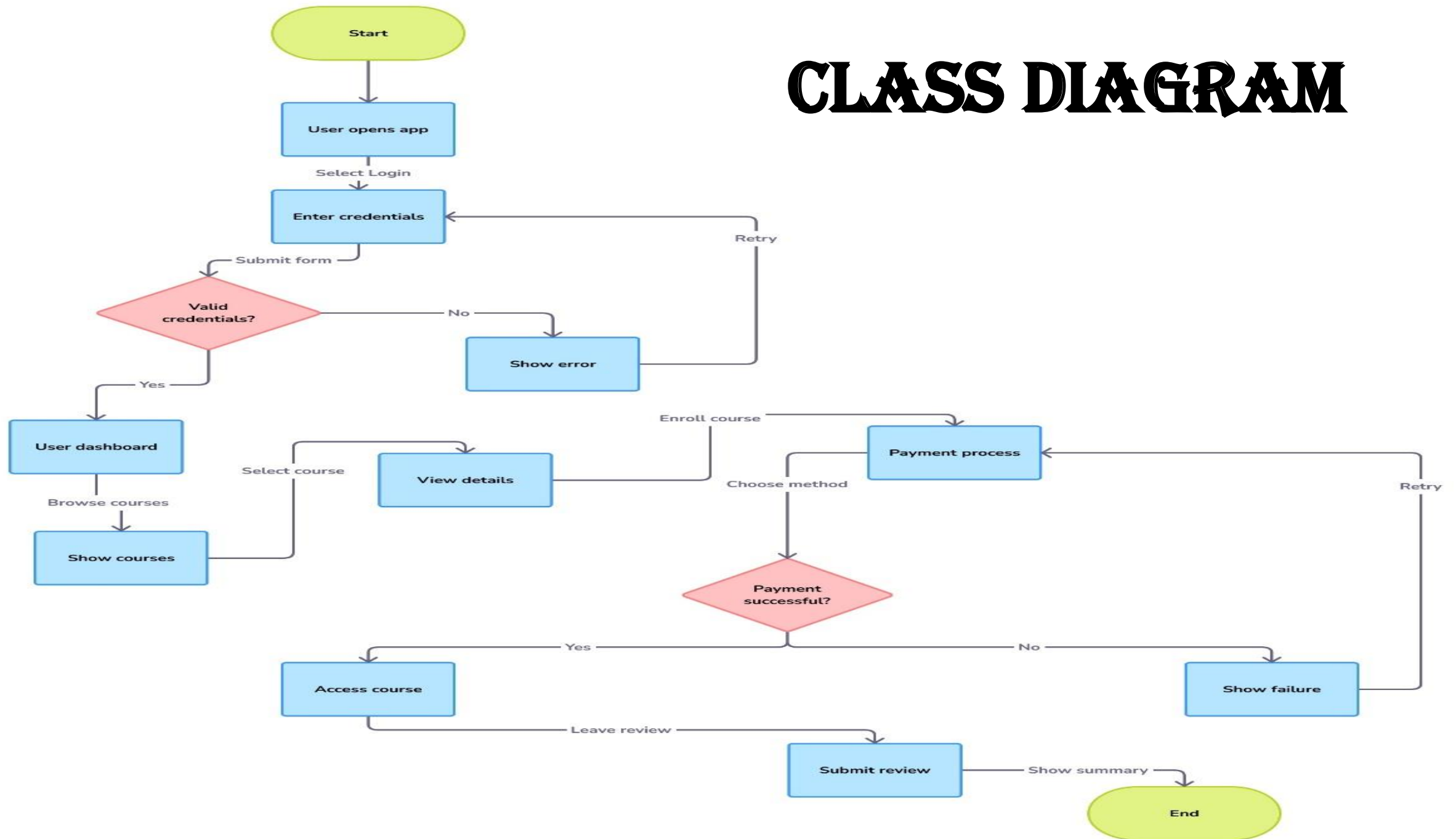
8. Discount

- Retrieves applicable discount values from the database.
- Validates coupon codes.

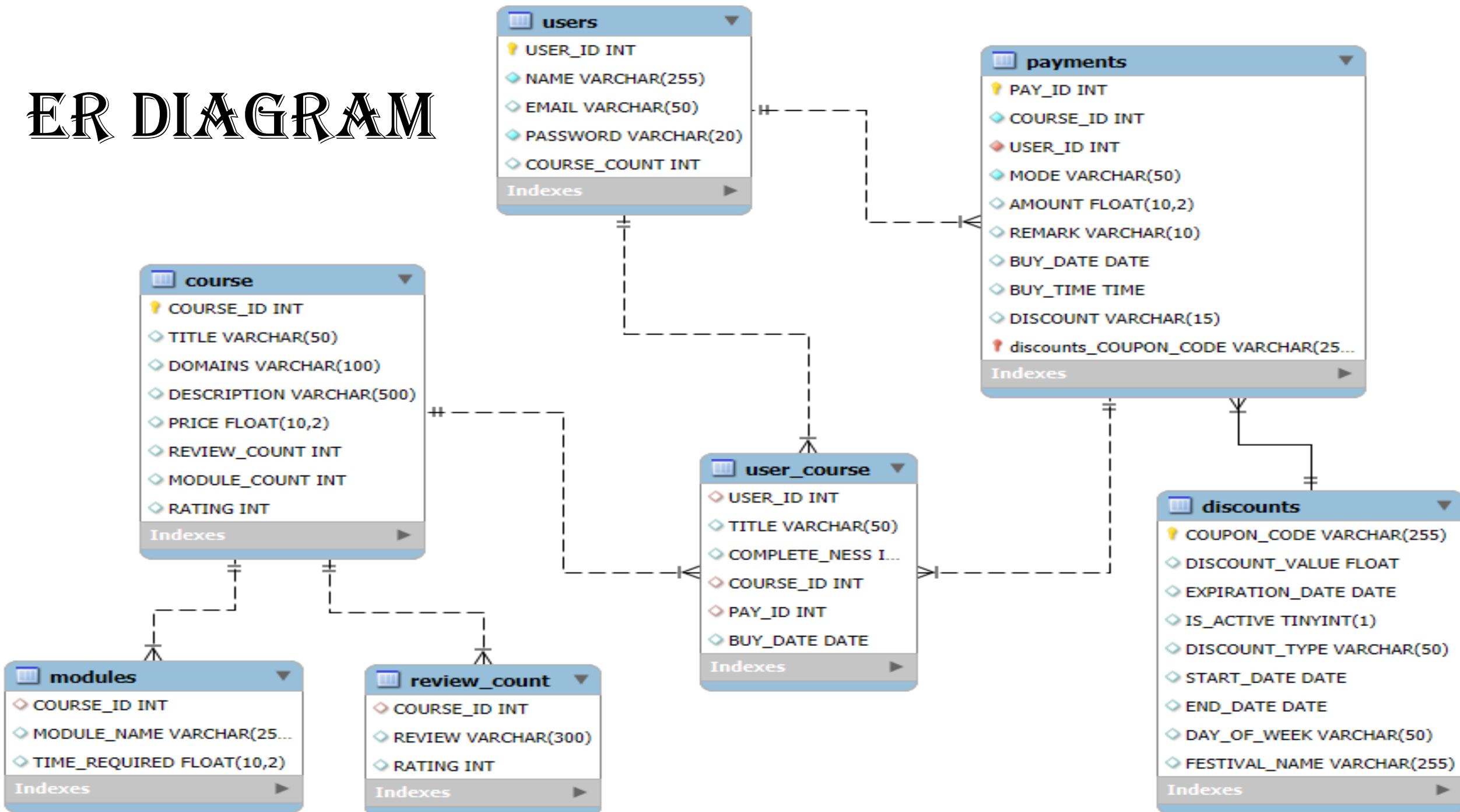
9. Database

- Handles database connections and SQL queries.
- Provides methods for inserting, updating, selecting, and deleting records.

CLASS DIAGRAM



ER DIAGRAM



FUTURE ENHANCEMENTS

1. **Mobile App Integration:** Expand to mobile platforms for better accessibility.
2. **Real-time Notifications:** Push notifications for updates and promotions.
3. **AI-Powered Recommendations:** Personalized course suggestions.
4. **Advanced Payment Options:** Support for multiple payment methods and cryptocurrencies.
5. **Live Classes & Webinars:** Real-time streaming of classes and sessions.
6. **Gamification:** Badges, achievements, and leaderboards.
7. **Multi-language Support:** Global reach with multi-language options.
8. **Social Learning:** Forums, groups, and peer interaction.
9. **Subscription Model:** Unlimited access via subscription.
10. **AI-assisted Course Creation:** Tools for instructors to generate content.

Thank you

FOR POWERSOINT PRESENTATION



THANK YOU

Thank you for your presentation. The information was very helpful and we appreciate your time and effort. We will be in touch with you again soon.



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